

Yeast Catalase Tests

Introduction

To see the effect of MC on catalase activity in yeast.

Materials

- › Yeast + growth medium (YPD)
- › Triton-X 100
- › MC solutions
- › H₂O₂
- › Camera

Procedure

Catalase test

1. Make multiple liquid cultures of yeast cells and grow them overnight on shaking (230rpm) in 30 °C
2. Spin the cells down and discard supernatant, resuspend cells in 5 ml of physiological saline and measure (and mark down) OD₆₀₀. Be sure that there is more than $1,8 \cdot 10^7$ cells in the solution meaning OD has to be >1. When measuring OD do a dilution so that the value you get is between 0,1-0,8, and calculate the real OD of original sample.
3. Pipette 0,5 ml of cell/saline solution into each glass tube, add 0,5 ml of MC solution and mix properly -> leave into room temperature for one hour!
4. Add 0,5 ml of 30 % H₂O₂ and 0,2 ml of 1 % TritonX-100 solutions.
5. Wait 5 minutes and measure the foam layer